### PROJECT DOCUMENTATION - SALES DATA VIDEO TUTORIAL

# Purpose, Key Concepts, and Expected Outcomes

Part 1 Video: https://www.youtube.com/watch?v=tFztu8Pka\_I

Part 2 Video: https://youtu.be/W1hkQmAvqE0

#### 1. Introduction

The video tutorial and accompanying slide deck present a complete demonstration of converting an unstructured retail-sales dataset into an interactive Power BI dashboard. The material covers data-quality assessment, systematic cleaning, exploratory analysis, metric definition, visual design, and final presentation. The content serves as a primary reference for analysts or new team members who require introductory instructions.

#### 2. Rationale

This tutorial records every stage, from identifying data flaws to selecting chart types, and thereby exposes the decision-making process typically omitted in intermediate steps. The recording may be replayed, paused, and adapted to other datasets without reliance on informal instruction.

# 3. Core Concepts Emphasised

# **Data Quality First**

Reliable insight depends on clean input. The tutorial demonstrates standardising text, converting strings to numeric values, and resolving missing observations as essential, non-optional tasks.

## **Exploration before Explanation**

Initial univariate and bivariate checks establish baseline understanding before metrics or visuals are chosen, ensuring that subsequent measures address genuine patterns in the data.

#### **Problem-Driven Metrics**

All metrics are linked directly to defined business questions. For example, total revenue and units sold support store-performance comparison. This alignment prevents dashboard sprawl and maintains analytical focus.

# **Purpose-Built Visual Design**

Each chart type is selected for its ability to communicate a specific message: KPI cards for snapshots, bar charts for comparisons, scatter plots for relationships, and line charts for trends. Each element is justified against its informational goal.

### 4. Advantages for Future Stakeholders

Clarity of process is achieved because every cleaning rule, analytical step, and design choice is shown in context, enabling straightforward replication.

The framework clean-explore-question-visualise is reusable across domains, providing a transferable methodology.

Onboarding efficiency improves when supervisors assign the tutorial instead of repeating live demonstrations, ensuring consistent instruction and reducing preparation time.

The slide deck functions as concise reference material, summarising phase objectives and common pitfalls.

# 5. Slide Deck Alignment

Slides correspond to four milestones in the tutorial video: data-cleaning rationale and actions; key findings from exploratory analysis; mapping of business questions to metrics; and an overview of the completed dashboard and its slicer configuration. During live delivery slide titles anchor the narrative while the video supplies technical detail. During independent study the deck operates as a structured checklist for replication.

### 6. Conclusion

The tutorial clarifies both the actions undertaken and the rationale behind them, transforming a single class exercise into a reusable blueprint. Future cohorts receive an explicit starting point, a shared vocabulary for discussing data workflows, and an evidence-based route from raw information to an executive-ready dashboard.